National Aeronautics and Space Administration
Goddard Space Flight Center

Inside Wallops

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NASA Renames NEAR Spacecraft for Planetary Science Pioneer Gene Shoemaker

The NASA satellite conducting the first-ever close-up study of an asteroid will be renamed to honor Dr. Eugene M. Shoemaker, a legendary geologist who influenced decades of research on the role of asteroids and comets in shaping the planets. The Near Earth Asteroid Rendezvous (NEAR) spacecraft, currently orbiting asteroid 433 Eros more than 145 million miles from Earth, will now be known as NEAR Shoemaker.

"Gene Shoemaker (left) was an inspirational, charismatic pioneer in the field of interplanetary science," said Dr. Carl B. Pilcher, Director of Solar System Exploration at NASA Headquarters. "It is a fitting tribute that we place his name on the spacecraft whose mission will expand on all he taught us about asteroids, comets and the origins of our solar system."

Shoemaker died in a 1997 car accident in the Australian outback while on an annual study of asteroid impact craters. With his wife and research partner, Carolyn, and David Levy, Shoemaker was part of the leading comet discovery team of the past century, perhaps most famous for finding the comet Shoemaker-Levy 9 that broke up and collided with Jupiter in 1994.

The impact of Comet Shoemaker/Levy 9 onto Jupiter was the first time in history that people had been able to predict an impact on a planet more than seconds in advance. During the collision of more than 20 fragments of the comet with Jupiter, NASA Wallops Flight Facility personnel launched a Terrier-Black Brant sounding rocket from the White Sands Missile Range, NM The payload was an Extreme Ultraviolet Spectrograph to examine how the impacts modified Jupiter's atmosphere and the region surrounding the moon Io.

Shoemaker was an expert on craters and the impacts that caused them. Shoemaker's work on the nature and origin of Meteor Crater in Arizona in the 1960s laid the foundation for research on craters throughout the solar system. He also established the lunar geological time scale that allowed researchers to date the features on the moon's surface.

Although he never realized his dream of tapping a rock hammer on the moon, Shoemaker taught Apollo astronauts about craters and lunar geology before they left Earth. Last year, when NASA's Lunar Prospector spacecraft crashed on the Moon, a small vial of Shoemaker's ashes, carried aboard the spacecraft, was scattered on the lunar surface.

Shoemaker was a key member of the 1985 working group that first studied the NEAR mission, defining its science objectives and designing a conceptual payload. Many of the group's recommended instruments were included in the actual spacecraft, which only a month into its yearlong orbit of Eros is already returning data on the asteroid's surface and geology.

The first in NASA's Discovery Program of low-cost planetary missions, NEAR launched from Cape Canaveral Air Station, FL, on Feb. 17, 1996. Johns Hopkins University Applied Physics Laboratory in Laurel, MD, designed and built the NEAR spacecraft and manages the mission for NASA's Office of Space Science.

Wallops Shorts……..

Balloon Launch

A NASA scientific balloon was successfully launched March 15 from Kiruna, Sweden. The four million cubic foot balloon carried an upper atmosphere research experiment to make measurements of the stratospheric composition to better understand the chemistry of the Arctic winter and to validate measurements of the SAGE III satellite. Dr. Geoffrey Toon, of the Jet Propulsion Laboratory was the principal investigator. Total flight time was 5 hours, 44 minutes.

NASA Spacecraft to Study Impact of Magnetic Storms

NASA is about to launch the first spacecraft dedicated to imaging the Earth's magnetosphere — an invisible magnetic field surrounding the planet that is strongly influenced by the solar wind.

A Delta II 7326 rocket is scheduled to launch the Imager for Magnetopause-to-Aurora Global Exploration, or IMAGE, satellite into orbit March 25 from Vandenberg Air Force Base, CA.

IMAGE is the first of its kind, designed to actually "see" most of the major charged-particle systems in the space surrounding Earth.

A Women's History Month Presentation

"The Opened Doors of the 21st Century: Women Who Paved the Way"

During past generations many women not only rose above the provincial "glass ceilings", sometimes they literally smashed them. Their efforts, along with their struggles and disappointments, were profound and enlightening. Their stories continue to mentor women of all ages.

Dr. Carolyn B. Stegman will briefly address the main issues of women's historical climb to equality and present some of the personal, motivational biographies of women of achievement during a Women's History Month presentation at 11:30 a.m. on March 22 in the Williamsburg Room of the cafeteria.

Stegman is the author of an upcoming book, Women of Achievement in Maryland History, a non-profit project chaired by Maryland's First Lady, Frances H. Glendening. The book is scheduled for distribution this year to every school and library in Maryland.

Since 1987, Stegman has taught courses in Psychology of Women, Gender Communication, and Conflict Resolution at Salisbury State University. For six years, she wrote a weekly column the Salisbury Daily Times newspaper concentrating on issues of diversity and communication. Stegman has presented seminars on women's issues throughout the United States, as well as in Europe, Africa and Japan.

For additional information contact Pat Pruitt, x1245 or Bev Hall, x1714.

Safety Message from the Administrator

Lessons Learned

"Those who cannot remember the past are condemned to repeat it." - George Santayana, Philosopher

For more than 40 years, NASA proudly holds an unparalleled record of accomplishments in science, aeronautics, and space. Our ability to continue to achieve great things increasingly depends on our ability to remember, learn from and build upon the important lessons of our past.

NASA's achievements rest in open scrutiny by our customers-the American taxpayers. While visible, some of our accidents, failures and close calls are not widely known. We conscientiously investigate, document and track all our successes and failures. Yet, all of that work is meaningless if we fail to learn from and incorporate these experiences into our ongoing and future programs, projects and operations.

Although NPG 7120.5A requires all programs and projects to review and apply significant lessons learned, how many people in the NASA program/project management community have taken corrective action steps based on these findings? How many are aware of this recurring theme? How many have reviewed these mishap reports? How many know where to look for this information? How many know that this information is available to them?

We've put a tremendous amount of energy and talent into documenting these experiences in our mishap reports and our lessons learned database for the sole purpose of preventing this type of recurrence. The Office of Safety and Mission Assurance maintains a Web site (http://llis.nasa.gov) to facilitate the capture and sharing of this type of information. But that system is just a data morgue unless everyone makes the effort to review, understand and act upon these findings and contribute their experiences. I suspect that some of our people may learn more about these incidents and their investigations from the national news media than they do from internal NASA sources.

I challenge the NASA management team to create new forums in which NASA's senior scientists, engineers and administrative staff can share their tremendous wealth of knowledge with their colleagues. We must do everything we can to capture and pass on the lessons learned from their experiences. Collectively, they represent NASA's greatest asset. I further challenge our senior scientists, engineers and administrative staff to leave a lasting legacy with this Agency by mentoring younger colleagues and helping to foster the next generation of NASA superstars.

Background and Actions/Best Practices for this topic can be found on: <http://www.nasa.gov/bios/health_messages.html>.

Recreational Use of Wallops Island - Piping Plover Beach Closures

Effective March 15, the south and north ends of Wallops Island are closed to pedestrian and vehicular use until Sept. 15, 2000. The closures are part of a continuing cooperation with the U.S. Fish and Wildlife Service to protect the piping plover, an endangered species along the Atlantic Coast.

The only area open for recreational use is the area north of the launch areas and south of the beach cable barrier. Pedestrian access points are the dune crossing east of the helicopter pad and the dune crossing east of Camera Station 15. Off road-vehicles can gain access to the open area by the dirt road and dune crossing northeast of Camera Station 15. This crossing is clearly marked and is the only authorized off road-vehicle access point. The recreational beach area may be used only during non-operational hours between sunrise and sunset.

For further information or a map of the areas, call Bill Phillips, x1209.

Payload Safety Review Process and Requirements

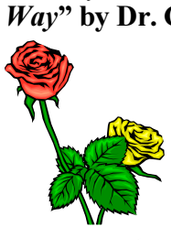
Where: Wallops Flight Facility
When: April 28, 8 a.m. to 4 p.m.

This course is offered at no cost to NASA civil service and contractor employees. Employees need to fill out the course registration form that requires their supervisor's signature.

Personnel wishing to attend this course need to respond before March 31, 2000. Additional information and course registration form can be found at: http://www.wff.nasa.gov/~code803/pdf/payload_safety_process.pdf

Women's History Month Speaker and Luncheon

***"The Opened Doors of the 21st Century: Women Who Paved the Way"* by Dr. Carolyn B. Stegman**



March 22
11:30 a.m. to 1 p.m.
Williamsburg Room

Tickets are $6 per person and are available in the Exchange.

NASA Agency-Wide Training Opportunity

International Project Management
April 30 - May 5, 2000
Hampton, VA

NASA Headquarters will present a course on International Project Management at the Quality Inn & Suites Conference Center, 1809 West Mercury Blvd., Hampton, VA, April 30 through May 5, 2000.

COURSE OBJECTIVE: To provide a forum for Project Managers and those working international projects. The course has two distinct sections that formulate the IPM course. The first focuses on working international projects and the second focuses on information for the Project Manger. Upon completion, NASA personnel will possess a stronger understanding of international project management and related issues.

TOPICS INCLUDE:
- International partners and structures.
- Export control.
- Building international relationships.
- International negotiations.
- Understanding across cultures.
- International project formulation, implementation and risk management.
- Country specific views.
- Legal and ethical issues.
- Shared experiences.

TARGET AUDIENCE:
Project Managers and those who are working on or supporting, or preparing to work on, an international project team.

HOW TO REGISTER:
Complete the APPL nomination form, including your supervisor's signature, and forward to your Center's Training Office for processing.

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